Annual Drinking Water Quality Report
City of Seaford, DE
I.D No. DE0000246
April 20, 2001

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. ***Our water supply comes from five wells, located within the city limits, and draws ground water from the Columbia Aquifer. After the water comes out of the wells, we add hypochlorite as disinfectant to protect you against microbial contaminants and we also add soda ash to adjust the ph to a neutral level.***

The Department of Natural Resources and Environmental Control (DNREC) will soon make further evaluation of the state's water supplies available, through a program designed to assess the susceptibility of public water sources to contamination.
We do not have a source water protection plan available from our office at this time but will be when it's available from the Department of Natural Resources and Environmental Control. Copies can be obtained by calling DNREC 302-739-4793.

We are pleased to report that our drinking water in 2001 met all Federal and State standards and we had no violations.

If you have any questions about this report or concerning your water utility, please contact Bobby Nibblett Jr., Public Works Superintendent, at 302-629-8307 or 302-629-9173. Also, the Mayor and Council meets on the second and

fourth Tuesdays of the month at 7:00 p.m at the City Hall Annex on High St.. Should you have any concern with the City of Seaford's drinking water quality and want to be placed on the Mayor and Council's agenda to discuss these, please contact Dolores Slatcher, City Manager, 302-629-9173, no later than Thursday prior to the regularly scheduled meeting.

The City of Seaford Water Department and the Office of Drinking Water, Delaware Division of Public Health routinely monitors for constituents in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1st to December 31st, **2000.** As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

Non-Detects (ND) - laboratory analysis indicates that the constituent is not present.

Parts per million (ppm) or Milligrams per liter (mg/l) - one part per million corresponds to one minute in two years or a single penny in $10,000.

Parts per billion (ppb) or Micrograms per liter - one part per billion corresponds to one minute in 2,000 years, or a single penny in $10,000,000.

Parts per trillion (ppt) or Nanograms per liter (nanograms/l) - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

Parts per quadrillion (ppq) or Picograms per liter (picograms/l) - one part per quadrillion corresponds to one minute in 2,000,000,000 years or one penny in $10,000,000,000,000.

Picocuries per liter (pCi/L) - picocuries per liter is a measure of the radioactivity in water.

Millirems per year (mrem/yr) - measure of radiation absorbed by the body.

Million Fibers per Liter (MFL) - million fibers per liter is a measure of the presence of asbestos fibers that are longer than 10 micrometers.
Nephelometric Turbidity Unit (NTU) - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

Action Level - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

Treatment Technique (TT) - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

Maximum Contaminant Level - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

Maximum Contaminant Level Goal - (mandatory language) The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

TEST RESULTS

Contaminant Violation Y/N Level Detected Unit Measurement MCLG MCL Likely Source of Contaminant

Microbiological Contaminants

1. Total Coliform Bacteria N 1 in June sample 0 0 5% monthly samples Naturally present in the environment

Radioactive Contaminants

5. Alpha emitters [N] 1.38 pCi/1 0 15 Erosion of natural deposits

Inorganic Contaminants.

14. Copper [N] 0.004-0.084 ppm 1.3 AL=1.3 Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives
16. Fluoride [N] 0.2 ppm 4 4 Erosion of natural deposits; water additive which promotes strong teeth; discharge from fertilizer and aluminum factories
17. Lead [N] ND-0.005 ppb 0 AL=15 Corrosion of household plumbing systems, erosion of natural deposits
19. Nitrate (as Nitrogen) [N] 6.7-7.0 ppm 10 10 Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits

Synthetic Organic Contaminants including Pesticides and Herbicides

26. Alachlor [N] 0.41-0.73 ppb 0
2 Runoff from herbicide used on row crops

Volatile Organic Contaminants

55. Benzene [N] 0.2 ppb 0
5 Discharge from factories; leaching from gas storage tanks and landfills
73. TTHM [Total trihalomethanes][N] .44-2.26 ppb 0 100
By-product of drinking water chlorination

Unregulated Inorganic Contaminants

77. Iron (Fe) [N] .05-.32 ppm 0
0.3
78. Sodium (Na) [N] 32-60 ppm 0

79. Alkalinity (Alk) [N] 57-86
ppm
80. pH [N] 7.7-8.1 ppm
6.5 - 8.5
81. Chloride (Cl) [N] 9.2-14.1 ppm
250
82. Hardness [N] 20 ppm

83. Total Dissolved Solids (TDS) [N] 139-201 ppm 500

*** All other contaminants were in compliance with the Safe Drinking Water Act.**

Microbiological Contaminants:

(1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present.

Radioactive Contaminants:

(5) Alpha emitters. Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.

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Inorganic Contaminants:

(14) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
(16) Fluoride. Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Children may get mottled teeth.
(17) Lead. Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.
(19) Nitrate. Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome.

Synthetic organic contaminants including pesticides and herbicides:

(26) Alachlor. Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.

Volatile Organic Contaminants:

(55) Benzene. Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
(73) TTHMs [Total Trihalomethanes]. Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for 30 seconds to 2 minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (1-800-426-4791).

Some people who drink water containing trihalomethanes in excess of the MCL over many years experience problems with their liver, kidneys, or central nervous systems, and may have increased risk of getting cancer.

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water is drinkable at these levels.

All sources of drinking water (both tap water and bottle water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animal or from human activity. In order to insure tap water is safe to drink, EPA prescribes regulations which limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration regulations established limits for contaminants in bottle water, which must provide the same protection for public health.

All drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that the water poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline at 1-800-426-4791.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

We have learned through our monitoring and testing that we had one positive total coliform result in our system, in June 2000. However, repeat tests were all negative and no fecal coliforms were found and therefore no reportable violations.This is just one example of the vigilant monitoring we do to ensure the quality and safety of the water we supply to you.

Nitrates: As a precaution we always notify physicians and health care providers in this area if there is ever a higher than normal level of nitrates in the water supply.

Lead: Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from

infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

Thank you for allowing us to continue providing your family with clean, quality water this year. In order to maintain a safe and dependable water supply we sometimes need to make improvements that will benefit all of our customers. These improvements are sometimes reflected as rate structure adjustments. Thank you for understanding.

If you have any questions, please call our office at 629-8307 or 629-9173. After office hours, please call the Seaford Police Department at 629-6644. You may also call the Office of Drinking Water, Delaware Division of Public Health in Dover at [302] 739-5410.
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We at the City of Seaford Water Department, work around the clock to provide top quality water to every tap . We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.